

WHAT IS CLAIMED IS:

1. A method of inhibiting proliferation of multiple myeloma cells, comprising the steps of:

5 contacting said cells with curcumin, wherein said curcumin inhibits proliferation of multiple myeloma cells.

2. A method of inducing apoptosis in multiple
10 myeloma cells, comprising the steps of:

contacting said cells with curcumin, wherein said curcumin induces apoptosis in multiple myeloma cells.

15 3. A method of increasing the cytotoxic effects of
 chemotherapeutic agent against multiple myeloma cells, comprising
 the steps of:

contacting said cells with said chemotherapeutic agent and curcumin, wherein said curcumin increases the cytotoxic effects of said chemotherapeutic agent against multiple myeloma cells.

4. The method of claim 3, wherein said
chemotherapeutic agent is selected from the group consisting of
vincristine, BCNU, melphalan, cyclophosphamide, Adriamycin,
5 prednisone and dexamethasone.

5. The method of claim 3, wherein said multiple
myeloma cells are CD138⁺ plasma cells.

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6. A method of treating multiple myeloma in an
individual, comprising the step of administering curcumin to said
individual.

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7. The method of claim 6, wherein said curcumin is
administered orally.

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8. The method of claim 6, wherein said curcumin is administered in a dose of from about 0.01 mg/kg of the individual's body weight to about 500 mg/kg of the individual's body weight.

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9. A method of increasing the cytotoxic effects of chemotherapeutic agent against multiple myeloma cells in an individual, comprising the steps of:

administering to said individual said
10 chemotherapeutic agent and curcumin, wherein said curcumin increases the cytotoxic effects of said chemotherapeutic agent against multiple myeloma cells in said individual.

15 10. The method of claim 9, wherein said chemotherapeutic agent is selected from the group consisting of vincristine, BCNU, melphalan, cyclophosphamide, Adriamycin, prednisone and dexamethasone.

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11. The method of claim 9, wherein said curcumin is administered orally.

5 12. The method of claim 9, wherein said curcumin is administered in a dose of from about 0.01 mg/kg of the individual's body weight to about 500 mg/kg of the individual's body weight.

10 13. The method of claim 9, wherein said multiple myeloma cells are CD138⁺ plasma cells.